Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 30 (cancelled)

Claims 31 - 32 (cancelled)

Claim 33. (currently amended) The method according to claim ~~31~~ 82, wherein the outer surface of each of said diagnostic particles is hydrophilic.

Claim 34. (currently amended) The method according to claim ~~31~~ 82, wherein the carrier is an aqueous solution.

Claim 35. (currently amended) The method according to claim ~~31~~ 82, wherein the aqueous solution is 5% glucose in water.

Claims 36 – 60 (cancelled)

Claim 61. (currently amended) The method according to claim ~~31~~ 82, wherein a surface of said diagnostic particles is coated with a surfactant coating, thereby generating surfactant coated diagnostic particles, and wherein said surfactant coating ~~that~~ increases the binding efficiency of said surfactant coated diagnostic particles with fibrin relative to ~~uncoated~~ diagnostic particles not having said surfactant coating.

Claims 62 - 63 (cancelled)

Claim 64. (currently amended) The method of claim ~~31~~ 82 wherein said diagnostic particles form a nanocolloid upon administration of said detectable reagent.

Claims 65 – 67 (cancelled)

Claim 68. (currently amended) The method of claim ~~31~~ 61, wherein said surfactant coating comprises $C_{16}EO_6$.

Claims 69 – 70 (cancelled)

Claim 71. (currently amended) The method according to claim ~~31~~ 82 wherein the outer surface of each of said diagnostic particles is hydrolyzed graphite.

Claim 72. (cancelled)

Claims 73 – 79 (cancelled)

Claim 80. (currently amended) A method for the *in vivo* detection of fibrin present in the bloodstream of a subject, said method comprising the steps of:

administering to the bloodstream of said subject an effective amount of a detectable reagent comprising discrete diagnostic particles dispersed in a pharmaceutically or veterinarily acceptable carrier, diluent, excipient, adjuvant or any combination thereof, wherein said diagnostic particles comprise a detectable marker encased in about 2 to 20 layers of carbon, ~~wherein the outer surface of said particles comprises graphitic carbon and~~ wherein

said diagnostic particles are made by heating a carbon crucible having deposited thereon a detectable marker to a temperature in the range of 2250° C to 3000° C, thereby generating suspended particles, and precipitating said suspended particles to form said diagnostic particles, wherein upon administration of said reagent said diagnostic particles are dispersed in the aqueous medium and form a stable colloid;

binding said diagnostic particles to said fibrin, wherein said diagnostic particles exhibit a specific affinity for ~~bind directly to~~ said fibrin; and

detecting the presence of said detectable marker in said bloodstream of said subject.

Claim 81. (currently amended) A method for the *in vivo* detection of fibrin present in a blood vessel of a subject, said method comprising the steps of:

administering into said blood vessel of the subject an effective amount of a detectable reagent comprising discrete diagnostic particles dispersed in a pharmaceutically or veterinarily acceptable carrier, diluent, excipient, adjuvant or any combination thereof, wherein said diagnostic particles comprise a detectable marker encased in at least two layers of carbon, ~~wherein the outer surface of said particles comprises graphitic carbon and~~ ~~wherein the outer surface of said particles comprises graphitic carbon and~~ wherein said diagnostic particles are made by heating a carbon crucible having deposited thereon a detectable marker to a temperature in

the range of 2250° C to 3000° C, thereby generating suspended particles, and precipitating said suspended particles to form said diagnostic particles, wherein upon administration of said reagent said diagnostic particles are dispersed in the aqueous medium and form a stable colloid;

binding said diagnostic particles to said fibrin, wherein said diagnostic particles exhibit a specific affinity for ~~bind directly to~~ said fibrin; and

detecting the presence of said detectable marker in said blood vessel of said subject.

82. (currently amended) A method for the *in vivo* detection of fibrin, said method comprising the steps of:

administering to said patient an effective amount of a detectable reagent comprising discrete diagnostic particles dispersed in a pharmaceutically or veterinarily acceptable carrier, diluent, excipient, adjuvant or any combination thereof, wherein said diagnostic particles comprise a detectable marker encased in at least two layers of carbon, wherein upon administration of said reagent said diagnostic particles are dispersed in the aqueous medium and form a stable colloid and wherein said particles are made by heating a carbon crucible having deposited thereon a detectable marker to a temperature in the range of ~~about~~ 2250° C to ~~about~~ 3000° C in an inert gas and in a sealed container, thereby generating particles suspended in said inert gas, and precipitating said particles suspended in said inert gas to form said diagnostic particles;

binding said diagnostic particles to said fibrin, wherein said diagnostic particles ~~binds directly to~~ exhibit a specific affinity for said fibrin; and

detecting the presence of said detectable marker in said patient.

83. (previously presented) The method of claim 82 wherein said particles suspended in said inert gas are precipitated using an electrostatic precipitator.

84 – 85. (cancelled)